Community and Social FAQ

How do I find other mesh users in my area?

Finding local mesh users is one of the most common early questions - and one of the most important, since a single node is useful but a community is transformative.

Start With Online Resources

- **Community maps** - For Meshtastic, use the official map linked from meshtastic.org (community maps such as meshmap.net also exist); for MeshCore, use map.meshcore.io. Zoom to your area and see nodes that have reported positions. Note: these maps show only opt-in nodes that have position reporting enabled, so an empty or sparse map does not mean there are no users near you - many nodes disable position reporting for privacy.
- **r/meshtastic on Reddit** - Active community with a strong culture of welcoming new users. Post "[State/City] - Anyone here?" and you'll typically get responses within hours.
- **Official Meshtastic Discord** - discord.gg/ktMAKGBnBs - Has regional channels organized by continent, then country, then US state. The most active community hub.
- **MeshCore Discord** - Separate community from Meshtastic; search for regional channels or post in #general asking about your area.
- **r/meshcore** - Smaller but growing subreddit for MeshCore users.

Local Amateur Radio Clubs

Ham radio clubs are increasingly interested in LoRa mesh. Find clubs at:

- **arrl.org/find-a-club** - ARRL club finder by zip code
- **QRZ.com club section** - Many clubs post there

Contact the club's net manager or digital committee. Even if they don't have mesh nodes yet, they may be interested in starting - and ham clubs are excellent vehicles for building community mesh networks.

Actually Going on the Mesh

The most reliable way to find local users is to simply get on the air with the default LongFast preset and listen. If there are active users in your area, you'll see their nodes in your node list within minutes. Send a message on the primary channel introducing yourself. Keep in mind the default channel is effectively public (it uses a well-known shared key): use it for discovery and general chat, but move any sensitive or incident-coordination traffic to a private channel.

If you hear nothing after 30 minutes in an area where you'd expect users, try:

- Moving to a higher elevation (rooftop, parking structure, hilltop)
- Checking a community map for nearby nodes and messaging them on Discord to arrange an on-air test

Note: don't switch to a slower preset (such as LONG_SLOW or VERY_LONG_SLOW) just to "find" users. All radios on a mesh must share the same modem preset to hear each other, so changing your preset away from the local default makes you invisible to everyone still on the default - the opposite of what you want when hunting for unknown local users. Only change presets if the whole local mesh has agreed to use the same one.

How do I start a mesh network where there are none?

Starting from zero is actually common - most community networks were started by one person who got tired of being alone on the mesh and decided to fix that. Here's how to bootstrap effectively.

This advice applies to both Meshtastic and MeshCore networks. Pick one protocol for your local mesh first, since the two do not interoperate (see the protocol comparison page) - everyone you recruit should run the same one.

The Minimal Viable Network

You need at least 2 nodes to have a network. Your first goal: find one other person willing to put up a node. Just one. A two-node network proves the concept and gives you something to demo to the next recruit.

Finding your second node:

- A family member or close friend in a different part of town
- A neighbor on higher ground than you
- Someone from the local ham radio club who agreed to try it out
- A coworker or friend interested in emergency preparedness

Once you have two nodes that can communicate, you have a live demo you can show to anyone.

Growing Past Two Nodes: 5 Tactics That Work

Common tactics that community organizers report working:

1. **Build a demo kit** - A pre-configured node on a tripod with an external antenna that you can bring to any meetup and have running in 5 minutes.
2. **Present at a local ham club meeting** - Request 10 minutes on the agenda. Demo is everything: bring a second node on the far end of the room.
3. **Post in local neighborhood apps** - You can frame it around preparedness, but be honest about what the mesh is: a supplemental, experimental comms tool, not a guaranteed emergency system. LoRa mesh is best-effort and unmonitored, so don't market it as a reliable emergency service - overselling its reliability can lead neighbors to depend on it when it may not deliver. For example: "I'm setting up a local mesh network for experimenting with off-grid text messaging. Anyone interested in participating?"
4. **Attend CERT training** - CERT graduates are motivated, community-oriented, and already thinking about emergency communications.
5. **Offer a "hardware night"** - Host a 2-hour session where you help 2-3 people set up their first node. Hands-on beats slides every time.

What Not to Do

- **Don't wait for critical mass** - Deploy your first node now. The mesh doesn't need to be large to be useful; it needs to exist to grow.
- **Don't over-engineer the first version** - An entry-level Heltec WiFi LoRa 32 V3 (around $20-30) with its stock antenna works. Optimize hardware after you have community, not before.
- **Don't gatekeep** - The easier it is to join, the faster you grow. Simplify your onboarding documentation and be patient with beginners.

Can I use Meshtastic or MeshCore for commercial purposes?

The short answer: yes, with some limitations. Both platforms are open source with licenses that permit commercial use, and the ISM band spectrum they operate on allows commercial activity. Here's what you need to know.

Software License Considerations

Meshtastic firmware is licensed under the GNU General Public License v3 (GPLv3). Commercial use is permitted, but:

- If you modify the firmware and distribute it (to customers, as a product), you must release your modifications as GPLv3 as well
- You cannot make the firmware proprietary or closed-source while distributing it
- Using Meshtastic firmware as-is without modification carries minimal GPL obligations

MeshCore firmware is licensed under the permissive **MIT License**, which freely allows commercial use and proprietary derivatives - so it is *less* restrictive than Meshtastic's GPLv3, not more. (Some optional premium client features are sold separately.) As always, verify the current license in the MeshCore GitHub repository before deployment.

FCC Part 15 and Commercial Use

FCC Part 15 (the ISM band rules) explicitly permits commercial use. There is no requirement to be a non-profit or individual user. Commercial enterprises can operate LoRa mesh networks on 902-928 MHz under Part 15 rules, subject to the same power limits and emission standards as individual users.

Important caveat: Part 15 operation is unlicensed and unprotected (47 CFR 15.5). Your device must accept any harmful interference it receives from licensed services, and it must stop transmitting if

it causes harmful interference to them. A commercial operation that needs guaranteed, interference-protected communications should not rely on a Part 15 mesh as its sole channel.

Common Commercial Applications

- **Event production companies** - Staff communication at festivals, sporting events, productions
- **Construction/site management** - Job site coordination in areas without reliable cell service
- **Agriculture/ranching** - Remote monitoring and worker communication
- **Mining and oil/gas** - Remote operations in areas without infrastructure
- **Telecommunications consulting** - Network design and deployment services

What You Cannot Do

- Exceed FCC Part 15 power limits: 1 W (30 dBm) maximum conducted output power. With the standard 6 dBi antenna allowance this yields roughly 4 W EIRP; higher-gain directional antennas require conducted power to be reduced dB-for-dB per 47 CFR 15.247(b)(4) and (c), so you cannot simply add a high-gain antenna to a 1 W radio and stay legal
- Operate outside the 902-928 MHz band in the US (or the equivalent ISM band in your country)
- Cause harmful interference to licensed services and fail to accept interference from licensed services
- Redistribute GPLv3-licensed firmware modifications without releasing source code

Consult with an RF engineer and attorney familiar with FCC regulations before major commercial deployments.